Amendments to the Claims:

Listing of Claims:

1. (original) A method for calibrating a driving signal of a printhead comprising:

(a) respectively utilizing a plurality of test driving signals for driving the printhead to print a plurality of test patterns on a printing medium according to a test data;

(b) selecting a test pattern with an optimal print quality from the test patterns;

(c) determining an optimal driving signal corresponding to the test pattern with the optimal print quality; and

(d) utilizing the optimal driving signal to drive the printhead to print data.

2. (original) The method of claim 1 wherein the printhead is an inkjet printhead, and in step (a), the printhead respectively prints the test patterns on a plurality of swaths.

3. (original) The method of claim 2 wherein each of the test driving signals comprises a main printing pulse, and the main printing pulses of the test driving signals all have the same voltage level but different pulse widths.

4. (withdrawn) The method of claim 2 wherein each of the test driving signals comprises a main printing pulse, and the main printing pulses of the test driving signals all have the same pulse width but different voltage levels.

5. (withdrawn) The method of claim 2 wherein each of the test driving signals comprises a main printing pulse and a pre-heat pulse, the main printing pulses of the test driving signals all have the same pulse width, the pre-heat pulses of the test driving signals all have the same pulse width, and the main printing pulses of the test driving signals and

the corresponding pre-heat pulses of the test driving signals correspond to different delay times.

6. (withdrawn) The method of claim 2 wherein each of the test driving signals comprises a main printing pulse and a pre-heat pulse, the main printing pulses of the test driving signals all have the same pulse width, the main printing pulses of the test driving signals and the corresponding pre-heat pulses of the test driving signals correspond to the same delay time, and the pre-heat pulses of the test driving signals have different pulse widths.

7. (original) The method of claim 2 wherein the test data corresponds to at least one straight line, and in step (b), the test pattern with the optimal print quality is selected according to deviation values between the test patterns and the straight line.

8. (original) The method of claim 7 wherein each of the test patterns is used to show a plurality of first color straight lines, and in step (b), the test pattern that has a minimum deviation value of the first color straight lines is selected to be the test pattern with the optimal print quality.

9. (withdrawn) The method of claim 2 wherein the test data corresponds to at least one block, and in step (b), the test pattern with the optimal print quality is selected according to uniformity of the test patterns, concentration of the test patterns, or size of ink drops within the test patterns.

10. (withdrawn) The method of claim 2 wherein the test data corresponds to a plurality of blocks with different colors, and in step (b), the test pattern with the optimal print quality is selected according to uniformity of the test patterns, concentration of the test patterns, or size of ink drops within the test patterns.

11. (withdrawn) The method of claim 1 wherein the printhead is an inkjet printhead, and in step (a), the printhead prints the test patterns on a swath of a printing medium.

12. (withdrawn) The method of claim 11 wherein each of the test driving signals comprises a main printing pulse, and the main printing pulses of the test driving signals all have the same voltage level but different pulse widths.

13. (withdrawn) The method of claim 11 wherein each of the test driving signals comprises a main printing pulse, and the main printing pulses of the test driving signals all have the same pulse width but different voltage levels.

14. (withdrawn) The method of claim 11 wherein each of the test driving signals comprises a main printing pulse and a pre-heat pulse, the main printing pulses of the test driving signals all have the same pulse width, the pre-heat pulses of the test driving signals all have the same pulse width, and the main printing pulses of the test driving signals and the corresponding pre-heat pulses of the test driving signals correspond to different delay times.

15. (withdrawn) The method of claim 11 wherein each of the test driving signals comprises a main printing pulse and a pre-heat pulse, the main printing pulses of the test driving signals all have the same pulse width, the main printing pulses of the test driving signals and the corresponding pre-heat pulses of the test driving signals correspond to the same delay time, and the pre-heat pulses of the test driving signals have different pulse widths.

16. (withdrawn) The method of claim 11 wherein the test data corresponds to at least one straight line, and in step (b), the test pattern with the optimal print quality is selected

according to the deviation values between the test pattern and the straight line.

17. (withdrawn) The method of claim 2 wherein test data corresponds to at least one block, and in step (b), the test pattern with the optimal print quality is selected according to uniformity of the test patterns, concentration of the test patterns, or size of ink drops within the test patterns.

18. (original) A printing device comprising:

a printhead comprising a plurality of nozzles; and

a controller electrically connected to the printhead for utilizing a plutality of driving signals to respectively drive at least a heating resistor of the printhead to print a plurality of test patterns on a printing medium;

wherein the printing device selects an optimal driving signal that corresponds to a test pattern with an optimal print quality, and utilizes the optimal driving signal to drive the printhead to print data.

19. (original) The printing device of claim 18 wherein the printhead is an inkjet printhead.

20. (original) The printing device of claim 18 further comprising an image-capturing module electrically connected to the controller for capturing a plurality of images corresponding to the test patterns, wherein the controller selects a test pattern from the test patterns to be the test pattern with the optimal print quality according to the images.

21. (original) The printing device of claim 20 wherein the test pattern is capable of printing a plurality of first color straight lines, and the controller selects a pattern that has a minimum deviation value of the first color straight lines to be the test pattern with the optimal print quality.